

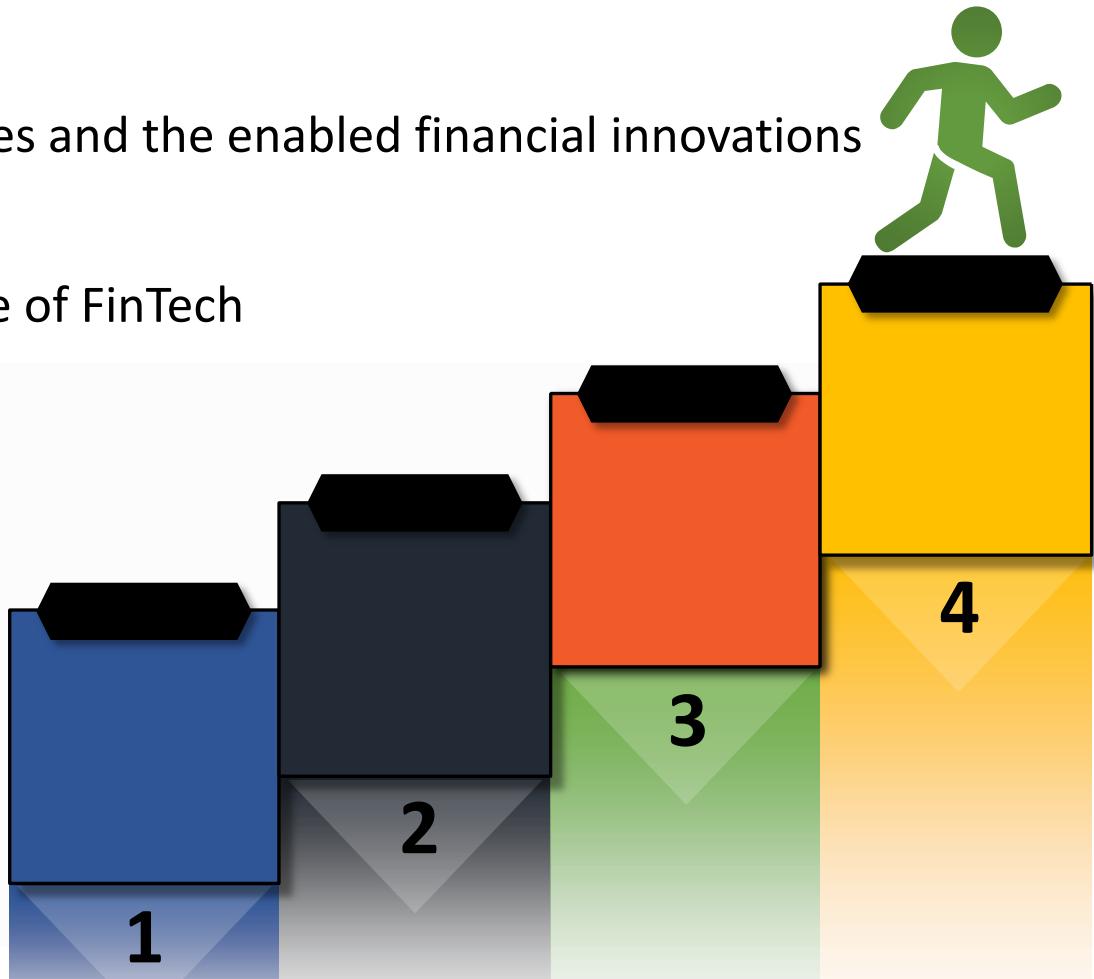


Introduction FinTech:History and Today

Topic 1 AFIN8014 FinTech and Innovation

Learning Objectives

1. Gain insights of FinTech development
2. Understand the FinTech global landscape: its investment, adoptions and domains
3. Outline the main Fin-technologies and the enabled financial innovations
4. Appreciate the disruption nature of FinTech



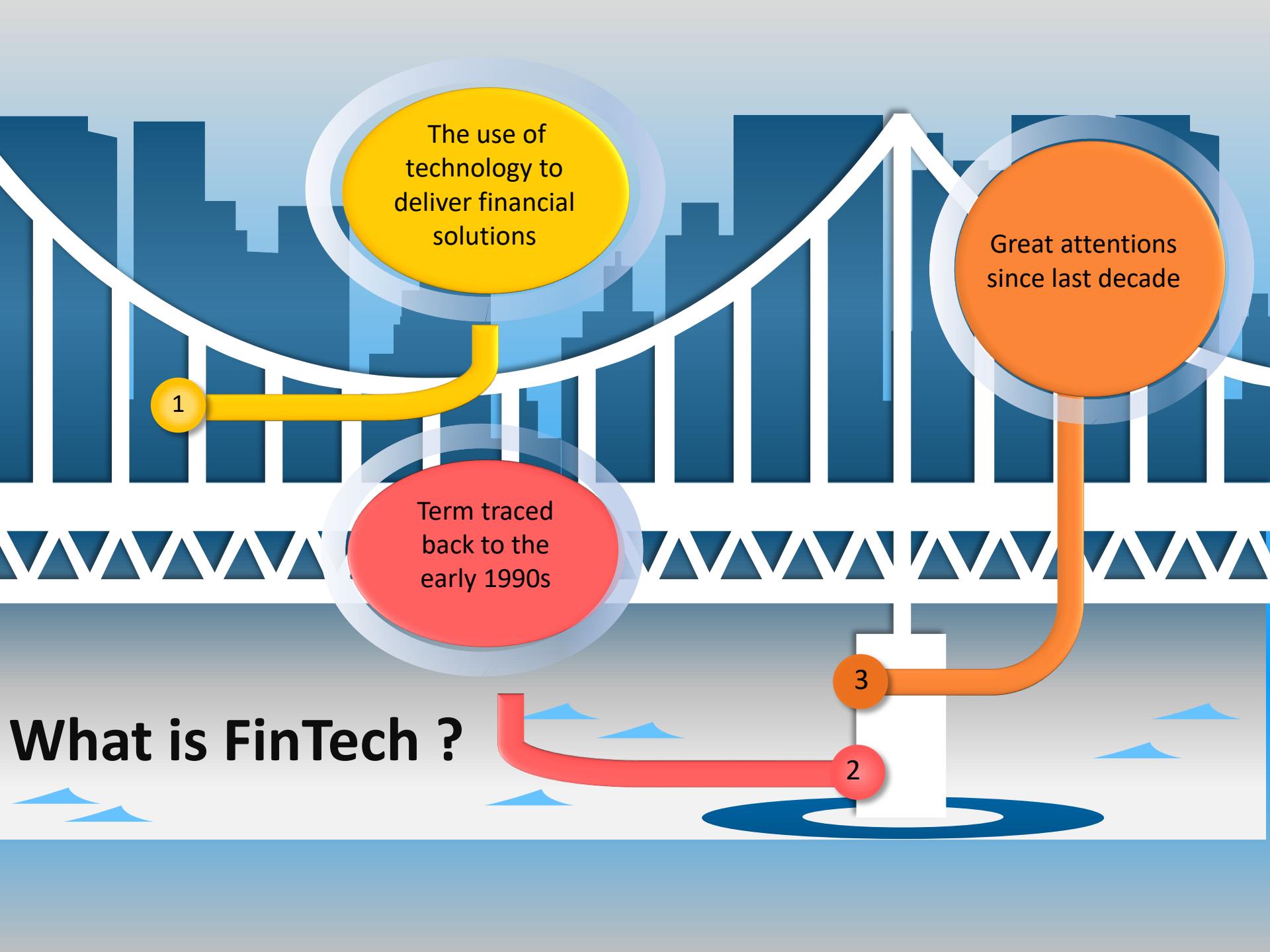
Finance

Technology

FinTech

A

B



The use of technology to deliver financial solutions

Great attentions since last decade

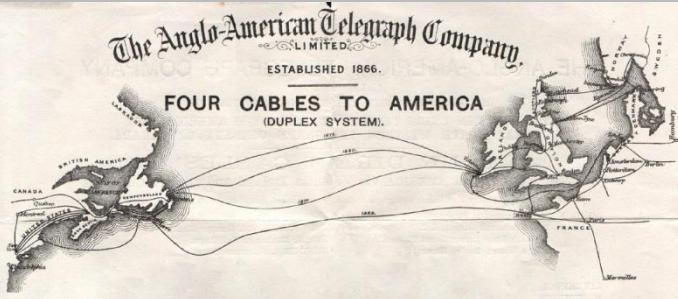
1

Term traced back to the early 1990s

3

2

What is FinTech ?



1866
the first
transatlantic
cable

1850 1950 1960 1970 1980



1967
First ATM



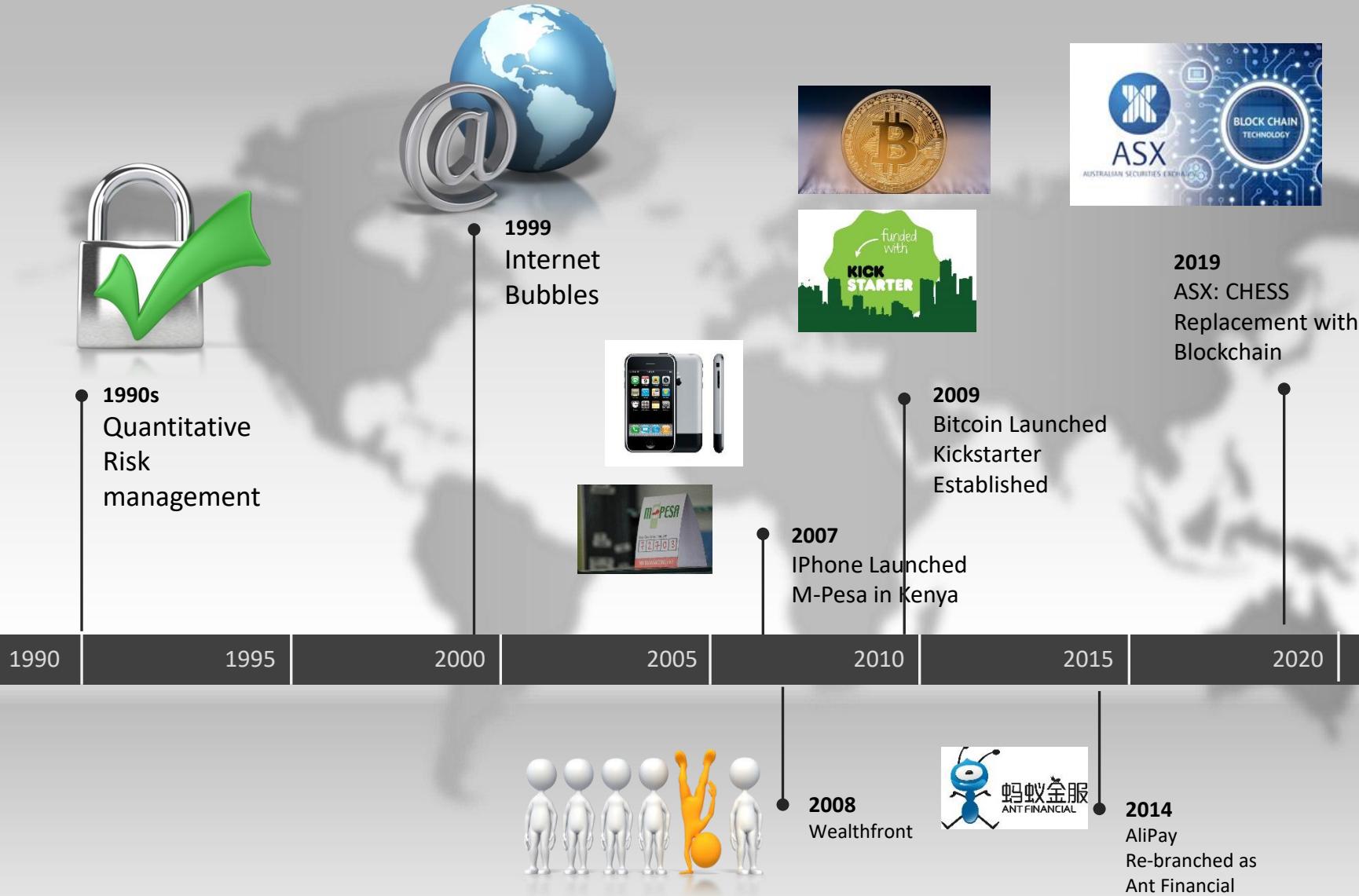
1983
Online
Banking

1971
NASDAQ



1973
SWIFT

150 years of FinTech



150 years of FinTech

150 years of FinTech

- **1866-1967 : FinTech 1.0**
 - The first transatlantic cable allowed the initial combination of finance and technology, culminating in the first period of financial globalisation.
- **1967-2008: FinTech 2.0**
 - Analogue to digital, led by traditional financial institutions:
- **2008-Present: FinTech 3.0**
 - Emergence of new players (*e.g. start-ups*) alongside existing large companies already in the space (*e.g. core banking vendors*).
 - FinTech 3.0 : Developed Countries
 - FinTech 3.5: Developing Countries
- Source: Arner et al., 2016

150 years of FinTech

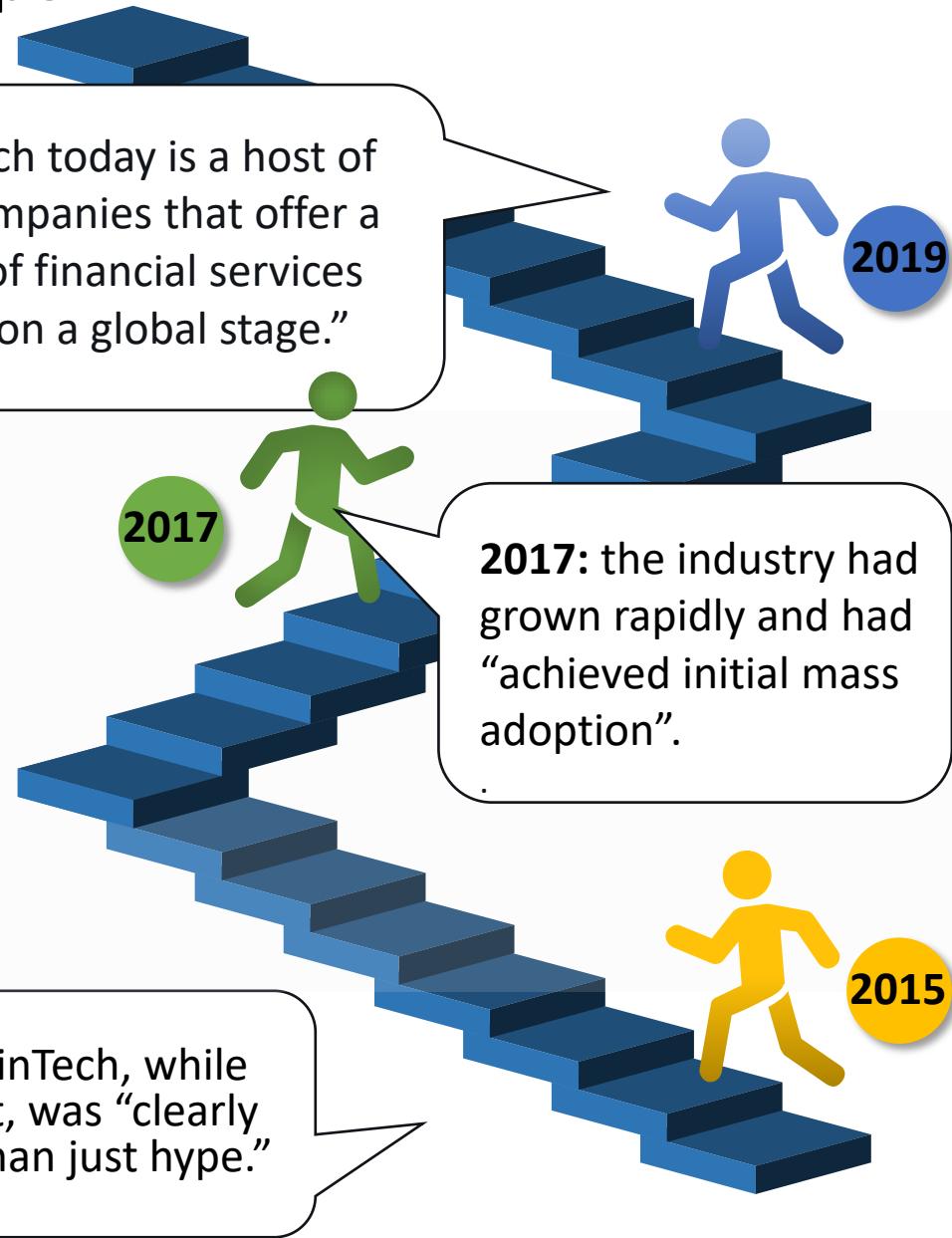
Date	1866 - 1967	1967 - 2008	2008 - Current	
Era	FinTech 1.0	FinTech 2.0	FinTech 3.0	FinTech 3.5
Geography	Global / Developed	Global / Developed	Developed	Emerging / Developing
Key Elements	Infrastructure / computerisation	Traditional / internet	Mobile / Start-ups / New entrants	
Shift Origin	Linkages	Digitalization	2008 financial crisis / smartphone	Last mover advantage

Source: Arner et.al., 2016

The Global Fintech Landscape: FinTech Adoption

EY defines FinTech as
'organizations that combine innovative business models and technology to enable, enhance and disrupt financial services.'

2019: "FinTech today is a host of seasoned companies that offer a broad array of financial services and operate on a global stage."



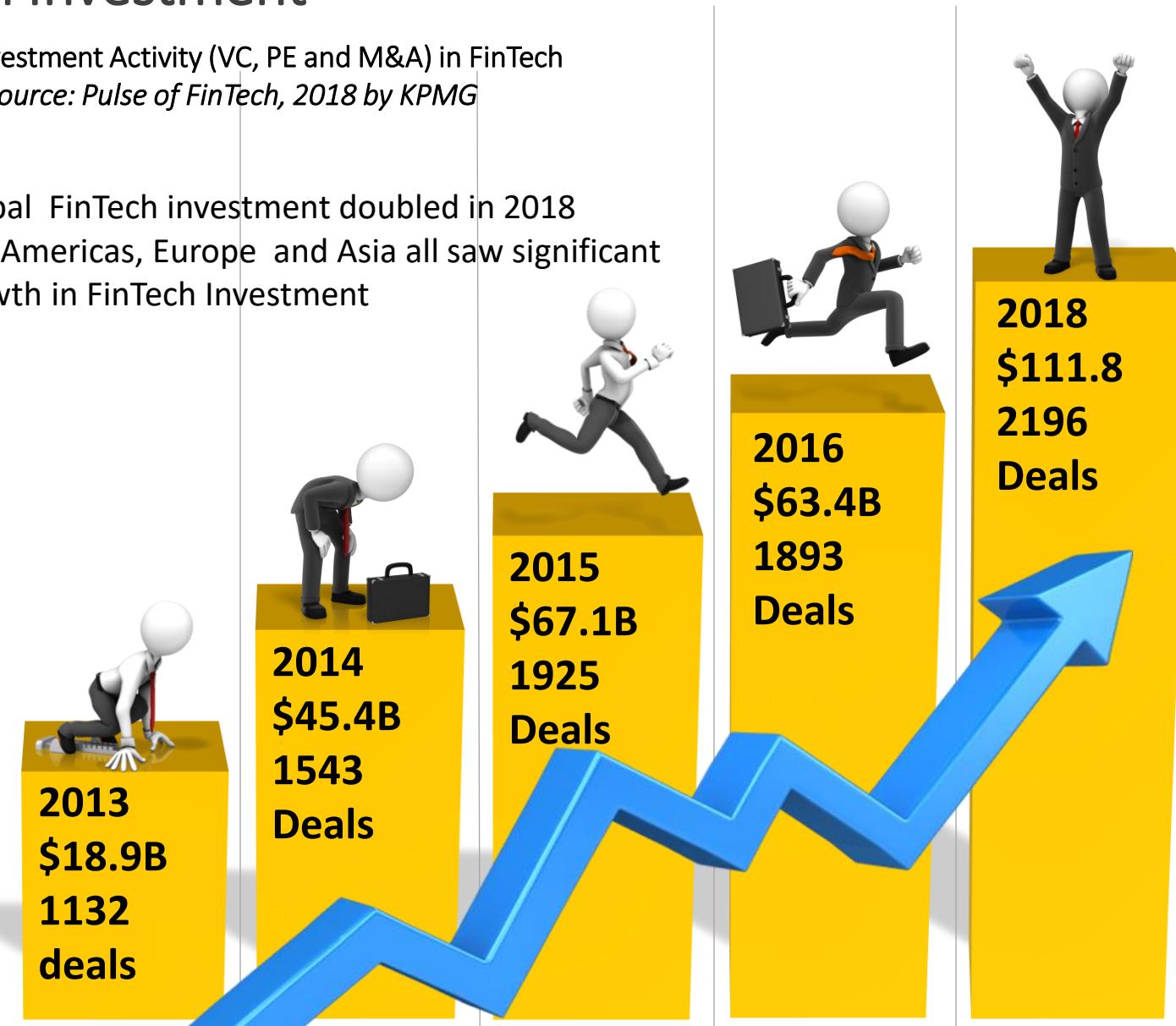
EY FinTech Adoption Index

The Global Fintech Landscape: FinTech Investment

Total Investment Activity (VC, PE and M&A) in FinTech

Source: *Pulse of FinTech, 2018 by KPMG*

- Global FinTech investment doubled in 2018
- The Americas, Europe and Asia all saw significant growth in FinTech Investment



Global Top 10 FinTech Deals in 2018

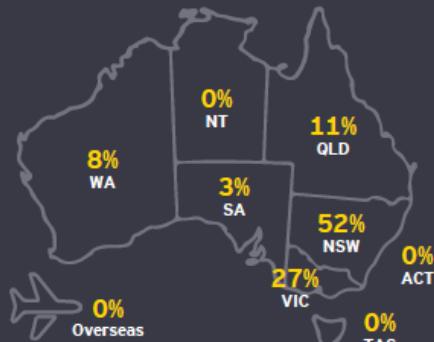


- | | |
|---|---|
| <p>1 Refinitiv — \$17B, Eagan, US
Institutional/B2B
<i>Buyout</i></p> <p>2 Ant Financial — \$14B, Hangzhou, China
Payments/transactions
<i>Series C</i></p> <p>3 Worldpay — \$12.9B, London, UK
Payments/transactions
<i>M&A</i></p> <p>4 Nets — \$5.5B, Ballerup, Denmark
Payments/transactions
<i>Buyout</i></p> <p>5 Blackhawk Network Holdings — \$3.5B,
Pleasanton, CA
Payments/transactions
<i>Buyout</i></p> | <p>6 VeriFone — \$3.4B, San Jose, US
Payments/transactions
<i>Buyout</i></p> <p>7 iZettle — \$2.2B, Stockholm, Sweden
Payments/transactions
<i>M&A</i></p> <p>8 Fidessa Group — \$2.1B, Woking, UK
Institutional/B2B
<i>Buyout</i></p> <p>9 Ipreo — \$1.9B, New York, US
Institutional/B2B
<i>M&A</i></p> <p>10 IRIS Software Group — \$1.7B,
Datchet, UK
Institutional/B2B
<i>Buyout</i></p> |
|---|---|

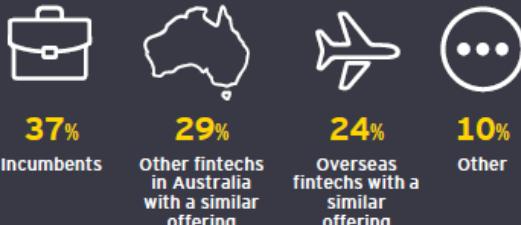
Source: Pulse of Fintech 2018, Global Analysis of Fintech, KPMG International (data provided by PitchBook) February 13, 2019

FinTech Australia

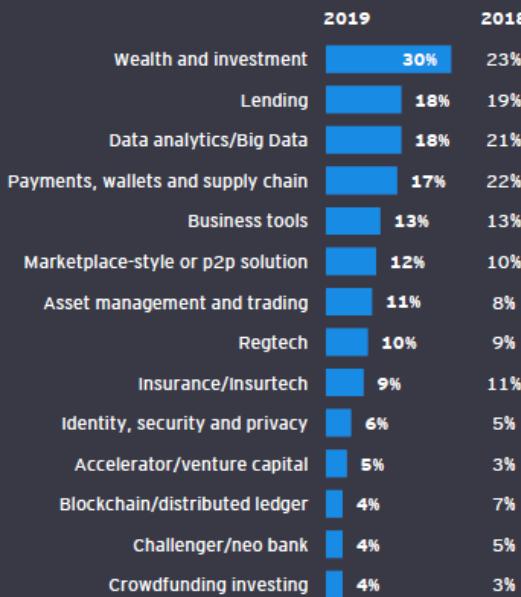
Business base



Biggest competitors (excl. none)



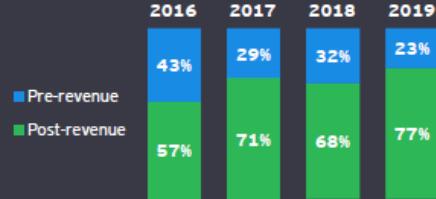
Type of fintech (multiple response)



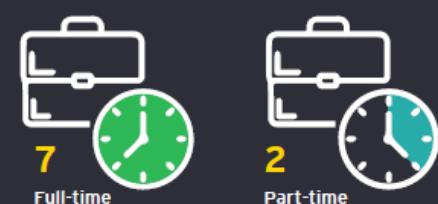
Age of company (excl. didn't answer)



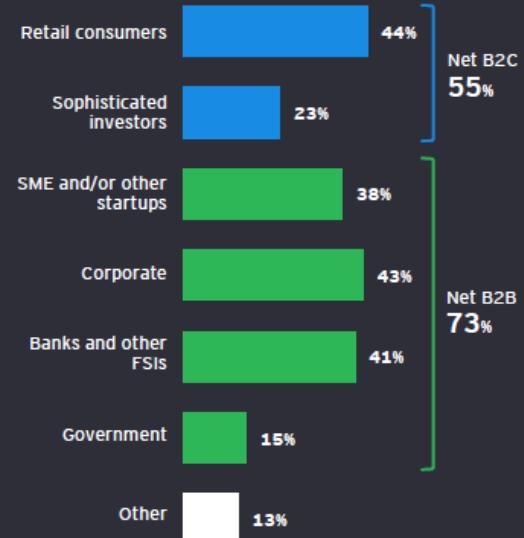
Company stage



Number of employees (median)

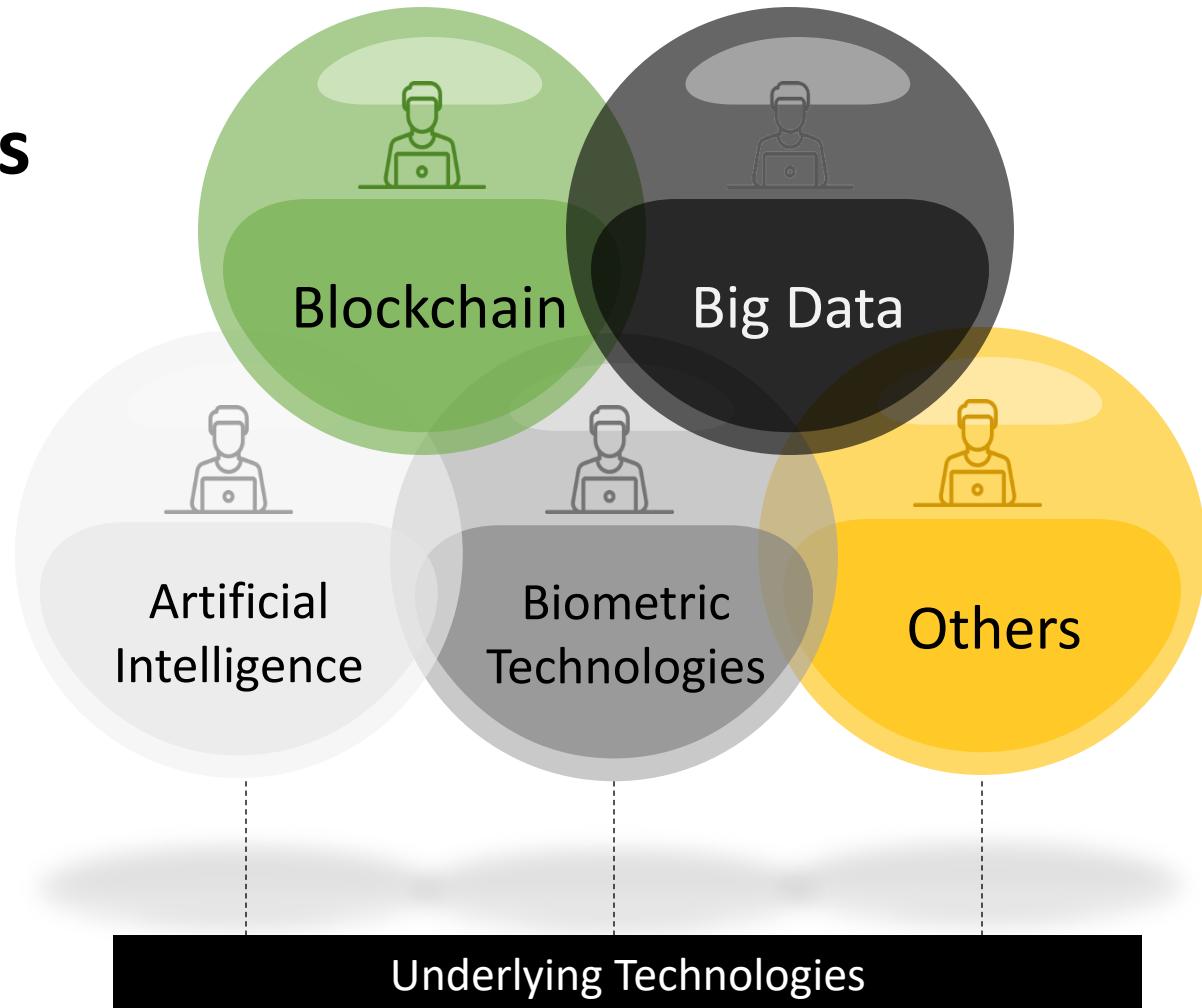


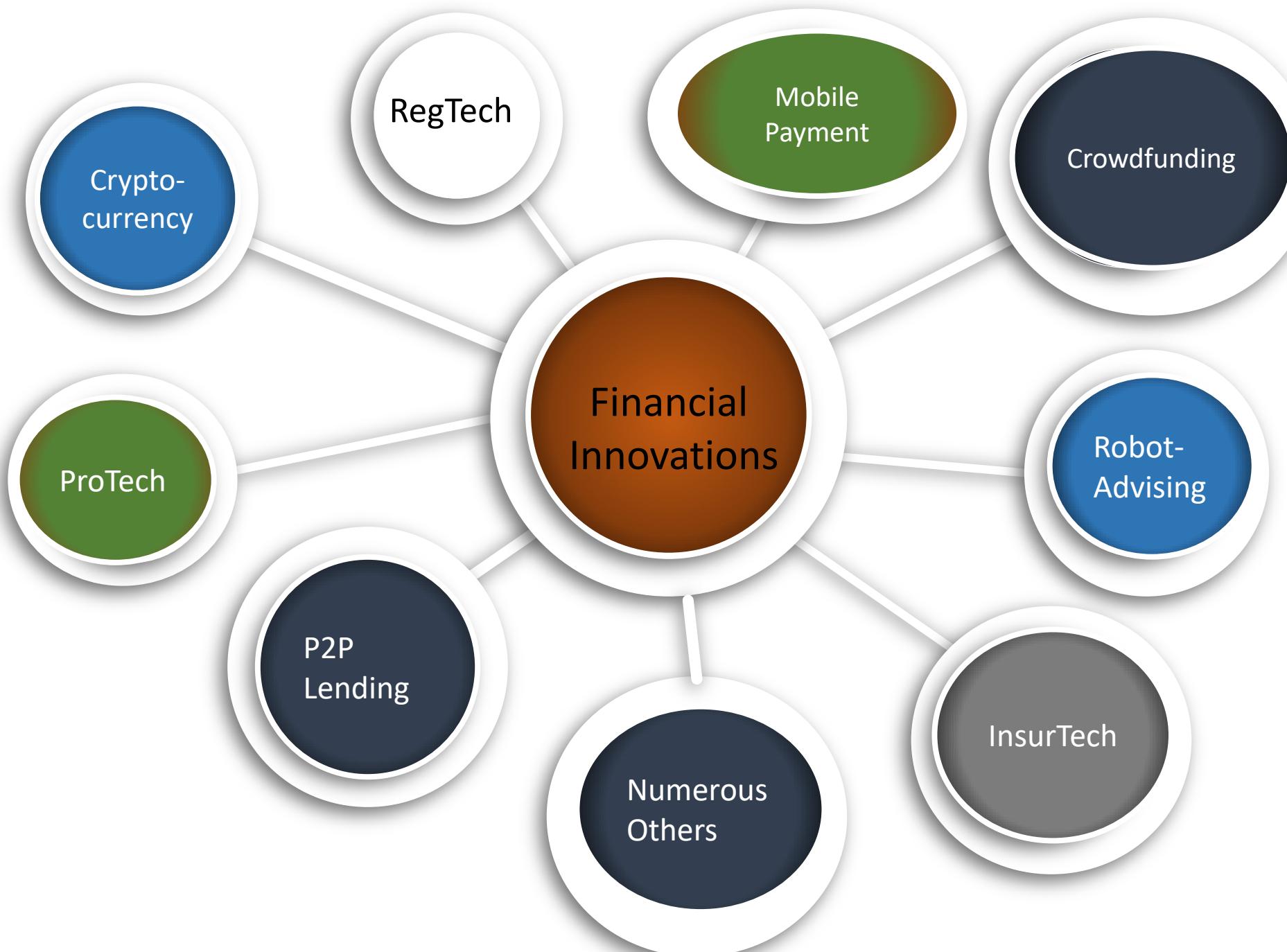
End customers (multiple response - excl. don't know)



Source: EY FinTech Australia Census 2019

Fin- Technologies

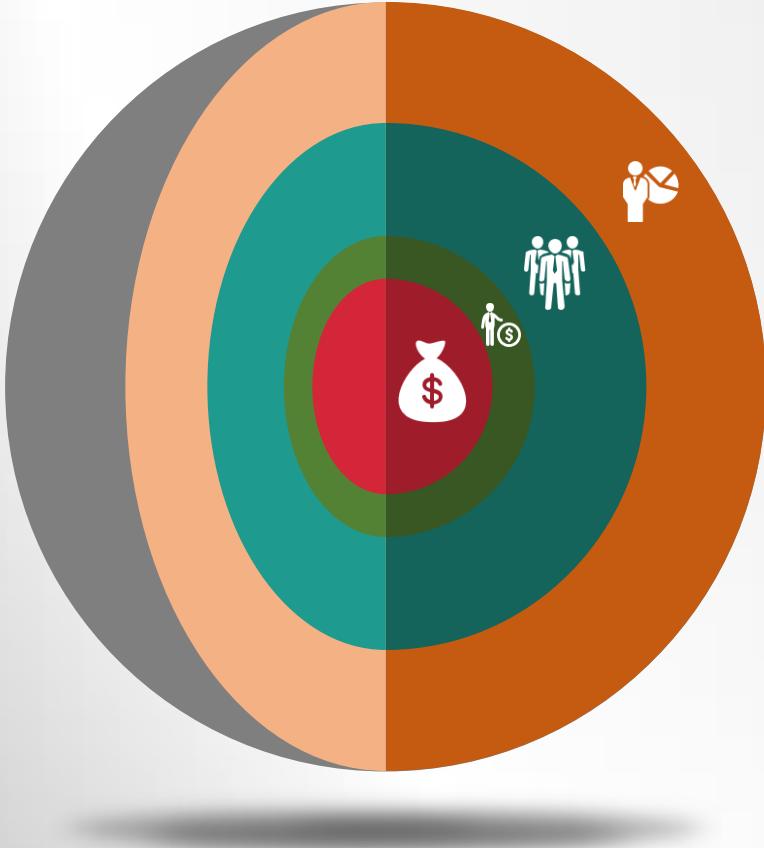




Disruption Nature of FinTech



Disruption Nature of FinTech



GFS

ensures that **scarce savings** are **allocated** optimally among competing investment over **time** and across **geographic** space

Intermediation

- **links** providers and users of funds
- **effectuates** the primary functions of finance and create **efficiencies**

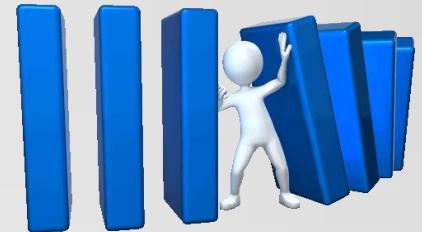
FinTech Disruption

Driven by technologies and regulations, more people seek to **bypass** traditional financial markets to obtain **lower costs, fewer restrictions and more efficiency** .

FinTech Disruption

Competition/Cooperation among disruptors and incumbent financial institutions

Disruption Nature of FinTech



Existing Problems

- Money and Payment
- Financial Advisory
- Markets and Trading
- Pricing and Risk
- Others



Be innovative to solve problems

- Altering the relationship between consumers and financial service providers
- Lowering barriers for market entry
- Disrupting the existing business models in financial industry
- Challenging the roles of traditional financial intermediaries
- Competition and/or cooperation among incumbents and new entries
- How to evaluate innovations and how to regulate them ?

Applications of New Technologies to Financial Services

Technology	Payment	Advisory	Investment & Trading	Lending & Funding	Insurance	Security	Operations	Communications
Blockchain (Distributed Ledger)	✗	✗	✗	✗	✗	✗	✗	✗
Big Data		✗	✗	✗	✗	✗	✗	✗
Internet of Things					✗			✗
Cloud Computing				✗			✗	
Artificial Intelligence		✗	✗		✗			✗
Biometric					✗	✗		
Augmented/ Virtual Reality		✗	✗					✗

Source: table 1, OECD (2018), Financial Markets, Insurance and Private Pensions: Digitalisation and Finance